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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 9

Complete if Known

Application Number . 10/677,210

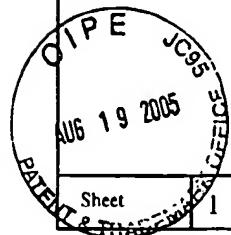
Filing Date 10/02/2003

First Named Inventor Felix A. Perriello

Group Art Unit 1724

Examiner Name Chester T. Barry

Attorney Docket Number GLOB 64012



Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CTB		WILSON ET AL., "Biotransformation of Trichloroethylene in Soil," <i>Applied and Environmental Microbiology</i> , January, 1985; p.242-243, Vol. 49, No. 1.	
		NELSON ET AL., "Aerobic Metabolism of Trichloroethylene by a Bacterial Isolate," <i>Applied and Environmental Microbiology</i> , August 1986, p. 383-384, Vol. 52.	
		LITTLE ET AL., "Trichloroethylene Biodegradation by a Methane-Oxidizing Bacterium," <i>Applied and Environmental Microbiology</i> , April 1988, p. 951-956, Vol. 54.	
		ARCIERO ET AL. "Degradation of Trichloroethylene by the Ammonia-Oxidizing Bacterium <i>Nitrosomonas Europaea</i> ," <i>Biochemical and Biophysical Research Communications</i> , March 15, 1989; p. 640-643, Vol. 159, No. 2.	
		OLDENHUIS ET AL., "Degradation of Chlorinated Aliphatic Hydrocarbons by <i>Methylosinus trichosporium</i> OB3b Expressing Soluble Methane Monooxygenase," <i>Applied and Environmental Microbiology</i> , November 1989; p. 2819-2826, Vol. 55, No. 11.	
		TSIEN ET AL., "Biodegradation of Trichloroethylene by <i>Methylosinus trichosporium</i> OB3b," <i>Applied and Environmental Microbiology</i> , December 1989; p. 3155-3161, Vol. 55, No. 12.	
		VANNELLI ET AL., "Degradation of Halogenated Aliphatic Compounds by the Ammonia-Oxidizing Bacterium <i>Nitrosomonas europaea</i> ," <i>Applied and Environmental Microbiology</i> , April 1990; p. 1169-1171, Vol. 56, No. 4.	
CTB		FOLSOM ET AL. "Phenol and Trichloroethylene Degradation by <i>Pseudomonas cepacia</i> G4: Kinetics and Interactions Between Substrates," <i>Applied and Environmental Microbiology</i> , May 1990; p. 1279-1285, Vol. 56, No. 5.	

Examiner Signature	CHESTER T. BARRY PRIMARY EXAMINER	Date Considered 11/10/06
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Sheet	2		9	Group Art Unit	1724
				Examiner Name	Chester T. Barry
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CTB		BROHOLM ET AL., "Toxicity of 1,1,1-Trichloroethane and Trichloroethene on a Mixed Culture of Methane-Oxidizing Bacteria", <i>Applied and Environmental Microbiology</i> , August 1990, p. 2488-2493, Vol. 56, No. 8.	
		HENRY ET AL., "Influence of Endogenous and Exogenous Electron Donors and Trichloroethylene Oxidation Toxicity on Trichloroethylene Oxidation by Methanotrophic Cultures from a Groundwater Aquifer," <i>Applied and Environmental Microbiology</i> , January 1991; p. 236-244, Vol. 57, No. 1.	
		OLDENHUIS ET AL., "Kinetics of Chlorinated Hydrocarbon Degradation by <i>Methylosinus trichosporium</i> OB3b and Toxicity of Trichloroethylene," <i>Applied and Environmental Microbiology</i> , January 1991; p. 7-14, Vol. 57, No. 1.	
		ALVAREZ-COHEN ET AL., "Product Toxicity and Cometabolic Competitive Inhibition Modeling of Chloroform and Trichloroethylene Transformation by Methanotrophic Resting Cells," <i>Applied Environmental Microbiology</i> , April 1991; p. 1031-1037, Vol. 57, No. 4.	
		BÜYÜKSÖNMEZ ET AL., "Optimization of Simultaneous Chemical and Biological Mineralization of Perchloroethylene," <i>Applied and Environmental Microbiology</i> , June 1999; p. 2784-2788, Vol. 65, No. 6.	
		MAYMÓ-GATELL ET AL., "Reductive Dechlorination of Chlorinated Ethenes and 1, 2-Dichloroethane by 'Dehalococcoides ethenogenes' 195," <i>Applied and Environmental Microbiology</i> , July 1999; p. 3108-3113, Vol. 65, No. 7.	
CTB		HAMAMURA ET AL., "Diversity in Butane Monooxygenases Among Butane-Grown Bacteria," <i>Applied and Environmental Microbiology</i> , October 1999; p. 4586-4593, Vol. 65, No. 10.	

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CB		LÖFFLER ET AL., "16S rRNA Gene-Based Detection of Tetrachloroethene-Dechlorinating <i>Desulfuromonas</i> and <i>Dehalococcoides</i> Species," <i>Applied and Environmental Microbiology</i> , April 2000; p. 1369-1374, Vol. 66, No. 4.	
		FOGEL ET AL., Biodegradation of Chlorinated Ethenes by Methane-Utilizing Mixed Culture, <i>Applied and Environmental Microbiology</i> , April 1986, pp 720-724, Vol. 51, No. 4.	
		WACKETT ET AL., Survey of Microbial Oxygenases: Trichloroethylene Degradation by Propane-Oxidizing Bacteria, <i>Applied and Environmental Microbiology</i> , November 1989, pp 2960-2964, Vol. 55, No. 11.	
		FOX, Status and Trends in Bioremediation Treatment Technology, <i>Remediation</i> , Summer 1991, pp 293-303.	
		ALVAREZ-COHEN ET AL., Characterization of a Methane-Utilizing Bacterium from a Bacterial Consortium That Rapidly Degrades Trichloroethylene and Chloroform, <i>Applied and Environmental Microbiology</i> , June 1992, pp 1886-1893, Vol. 58, No. 6.	
		CHANG ET AL., Transformation Capacities of Chlorinated by Mixed Cultures Enriched on Methane, Propane, Toluene, or Phenol, <i>Biotechnology and Bioengineering</i> , November 9, 1994, pp 440-449, Vol. 45.	
CB		KIM ET AL., Aerobic Cometabolism of Chloroform and 1,1,1-Trichloroethane by Butane-Grown Microorganisms, <i>Bioremediation Journal</i> , 1997, pp 135-148, Vol. 1, No. 2.	

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CTB		HAMAMURA ET AL., Chloroform Cometabolism by Butane-Grown CF8, <i>Pseudomonas butanovora</i> , and <i>Mycobacterium vaccae</i> JOBS and Methane-Grown <i>Methylosinus trichosporium</i> OB3b, <i>Applied and Environmental Microbiology</i> , September 1997, pp 3607-3613, Vol. 63, No. 9.	
		STEFFAN ET AL., Biodegradation of the Gasoline Oxygenates Methyl tert-Butyl Ether, Ethyl tert-Butyl Ether, and tert-Amyl Methyl Ether by Propane-Oxidizing Bacteria, <i>Applied and Environmental Microbiology</i> , November 1997, pp 4216-4222, Vol. 63, No. 11.	
		DE BRUIN ET AL., "Complete Biological Reductive Transformation of Tetrachloroethene to Ethane", <i>Applied and Environmental Microbiology</i> , June 1992, p. 1996-2000, Vol. 58, No. 6. [ABSTRACT]	
		MOHN ET AL., "Reductive Dehalogenation of Chlorophenols by Desulfomonile tiedjei DCB-1", <i>Applied and Environmental Microbiology</i> , April 1992, p. 1367-1370, Vol. 58, No. 4. [ABSTRACT]	
		SO ET AL., "Initial Reactions in Anaerobic Alkane Degradation by a Sulfate Reducer, Strain AK-01", <i>Applied and Environmental Microbiology</i> , December 1999, p. 5532-5540, Vol. 65, No. 12. [ABSTRACT]	
		HAGGBLOM ET AL., "Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids," <i>Applied and Environmental Microbiology</i> , April 1993; p. 1162-1167, Vol. 59, No. 4. [ABSTRACT]	
CTB		RAMANAND ET AL., "Reductive Dehalogenation of Chlorinated Benzenes and Toluenes Under Methanogenic Conditions," <i>Applied and Environmental Microbiology</i> , October 1993; p. 3266-3272, Vol. 59, No. 10. [ABSTRACT]	

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CTB		COATES ET AL., "Anaerobic Degradation of Polycyclic Aromatic Hydrocarbons and Alkanes in Petroleum-Contaminated Marine Harbor Sediments", <i>Applied and Environmental Microbiology</i> , September 1997, p. 3589-3593, Vol. 63, No. 9. [ABSTRACT]	
		SO ET AL., "Isolation and Characterization of a Sulfate-Reducing Bacterium that Anaerobically Degrades Alkanes", <i>Applied and Environmental Microbiology</i> , July 1999, p. 2969-2976, Vol. 65, No. 7. [ABSTRACT]	
		LAUE ET AL., "Taurine Reduction in Anaerobic Respiration of <i>Bilophila wadsworthia</i> RZATAU", <i>Applied and Environmental Microbiology</i> , May 1997, p. 2016-2021, Vol. 63, No. 5. [ABSTRACT]	
		WISCHNAK ET AL., "Pseudomonas sp. Strain 273, an Aerobic α,ω -Dichloroalkane Degrading Bacterium", <i>Applied and Environmental Microbiology</i> , September 1998, p. 3507-3511, Vol. 64, No. 9. [ABSTRACT]	
		YE ET AL., "Anaerobic Dechlorination of Polychlorobiphenyls (Aroclor 1242) by Pasteurized and Ethanol-Treated Microorganisms from Sediments", <i>Applied and Environmental Microbiology</i> , April 1992, p. 1110-1114, Vol. 58, No. 4. [ABSTRACT]	
		WIEGEL ET AL., "Anaerobic Dehalogenation of Hydroxylated Polychlorinated Biphenyls by <i>Desulfitobacterium dehalogenans</i> ", <i>Applied and Environmental Microbiology</i> , May 1999, p. 2217-2221, Vol. 65, No. 5. [ABSTRACT]	
CTB		WU ET AL., "Establishment of a Polychlorinated Biphenyl-Dechlorinating Microbial Consortium, Specific for Doubly Flanked Chlorines, in a Defined, Sediment-Free Medium", <i>Applied and Environmental Microbiology</i> , January 2000, p. 49-53, Vol. 66, No. 1. [ABSTRACT]	

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CB		MIGUEZ ET AL., "Monitoring Methanotrophic Bacteria in Hybrid Anaerobic-Aerobic Reactors with PCR and a Catabolic Gene Probe", <i>Applied and Environmental Microbiology</i> , February 1999, p. 381-388, Vol. 65, No. 2. [ABSTRACT]	
		BEDARD ET AL., "Brominated Biphenyls Prime Extensive Microbial Reductive Dehalogenation of Aroclor 1260 in Housatonic River Sediment", <i>Applied and Environmental Microbiology</i> , May 1998, p. 1786-1795, Vol. 64, No. 5. [ABSTRACT]	
		WU ET AL., "Microbial Reductive Dechlorination of Aroclor 1260 in Anaerobic Slurries of Estuarine Sediments", <i>Applied and Environmental Microbiology</i> , March 1998, p. 1052-1058, Vol. 64, No. 3. [ABSTRACT]	
		SANFORD ET AL., "Characterization of <i>Desulfitobacterium chlororespirans</i> sp. nov., Which Grows by Coupling the Oxidation of Lactate to the Reductive Dechlorination of 3-chloro-4-hydroxybenzoate", <i>Applied and Environmental Microbiology</i> , October 1996, p. 3800-3808, Vol. 62, No. 10. [ABSTRACT]	
		NICHOLSON ET AL., "Reductive Dechlorination of Chlorophenols by a Pentachlorophenol-Acclimated Methanogenic Consortium", <i>Applied and Environmental Microbiology</i> , July 1992, p. 2280-2286, Vol. 58, No. 7. [ABSTRACT]	
		VON WINTZINGERODE ET AL., "Phylogenetic Analysis of an Anaerobic, Trichlorobenzene-Transforming Microbial Consortium", <i>Applied and Environmental Microbiology</i> , January 1999, p. 283-286, Vol. 65, No. 1. [ABSTRACT]	
CB		BEDARD ET AL., "Complete Reductive Dehalogenation of Brominated Biphenyls by Anaerobic Microorganisms in Sediment", <i>Applied and Environmental Microbiology</i> , March 1998, p. 940-947, Vol. 64, No. 3. [ABSTRACT]	

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CTB		VAN EEKERT ET AL., "Degradation and Fate of Carbon Tetrachloride in Unadapted Methanogenic Granular Sludge", <i>Applied and Environmental Microbiology</i> , July 1998, p. 2350-2356, Vol. 64, No. 7. [ABSTRACT]	
		BRADLEY ET AL., "Anaerobic Oxidation of [1,2- ¹⁴ C]Dichloroethene Under Mn(IV)-Reducing Conditions", <i>Applied and Environmental Microbiology</i> , April 1998, p. 1560-1562, Vol. 64, No. 4. [ABSTRACT]	
		FISH ET AL., "Biotransformations of Aroclor 1242 in Hudson River Test Tube Microcosms", <i>Applied and Environmental Microbiology</i> , December 1994, p. 4289-4296, Vol. 60, No. 12. [ABSTRACT]	
		LOCHER ET AL., "Uptake of 4-Toluene Sulfonate by Comamonas testosteroni T-2", <i>J. Bacteriol.</i> , February 1993, p. 1075-1080, Vol. 175, No. 4. [ABSTRACT]	
		SUN ET AL., "Isolation and Characterization of <i>Desulfovibrio dechloracetivorans</i> sp. nov., a Marine Dechlorinating Bacterium Growing by Coupling the Oxidation of Acetate to the Reductive Dechlorination of 2-Chlorophenol", <i>Applied and Environmental Microbiology</i> , June 2000, p. 2408-2413, Vol. 66, No. 6. [ABSTRACT]	
		BOYLE ET AL., "Isolation from Estuarine Sediments of a <i>Desulfovibrio</i> Strain Which Can Grow on Lactate Coupled to the Reductive Dehalogenation of 2,4,6-Tribromophenol", <i>Applied and Environmental Microbiology</i> , March 1999, p. 1133-1140, Vol. 65, No. 3. [ABSTRACT]	
CTB		COLE ET AL., "Isolation and Characterization of a Novel Bacterium Growing Via Reductive Dehalogenation of 2-Chlorophenol", <i>Applied and Environmental Microbiology</i> , October 1994, p. 3536-3542, Vol. 60, No. 10. [ABSTRACT]	

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CTR		DOJKA ET AL., "Microbial Diversity in a Hydrocarbon- and Chlorinated-Solvent-Contaminated Aquifer Undergoing Intrinsic Bioremediation", <i>Applied and Environmental Microbiology</i> , October 1998, p. 3869-3877, Vol. 64, No. 10. [ABSTRACT]	
		HUR ET AL., "Metabolism of Chlorofluorocarbons and Polybrominated Compounds by <i>Pseudomonas putida</i> G786(pHG-2) via an Engineered Metabolic Pathway", <i>Applied and Environmental Microbiology</i> , November 1994, p. 4148-4154, Vol. 60, No. 11. [ABSTRACT]	
		EPA, "Sequential Anaerobic/Aerobic Biodegradation of PCE at Watertown, Massachusetts", Cost and Performance Report, March 2000.	
		HOLLIGER ET AL., "A Highly Purified Enrichment Culture Couples the Reductive Dechlorination of Tetrachloroethene to Growth", <i>Applied and Environmental Microbiology</i> , September 1993, p. 2991-2997, Vol. 59, No. 9. [ABSTRACT]	
		MADSEN ET AL., "Isolation and Characterization of an Anaerobic Chlorophenol-Transforming Bacterium", <i>Applied and Environmental Microbiology</i> , September 1992, p. 2874-2878, Vol. 58, No. 9. [ABSTRACT]	
		MOHN ET AL., "Limited Degradation of Chlorophenols by Anaerobic Sludge Granules", <i>Applied and Environmental Microbiology</i> , July 1992, p. 2131-2136, Vol. 58, No. 7. [ABSTRACT]	
CTR		BAKER ET AL., <i>Bioremediation</i> , pp. 303-304, McGraw-Hill, Inc., 1994.	

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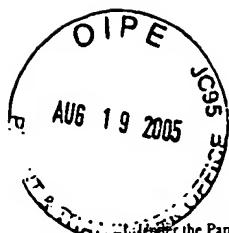
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CJB		www.biobutane.com/may2000.htm (downloaded on 11/18/02) dated 05/01/2000.	
		www.biobutane.com/march2000.htm (downloaded on 11/18/02) dated 03/01/2000.	
		Global BioSciences, Inc. Powerpoint® brand audiovisual presentation (downloaded from web on 11/18/02) (undated).	
CTB		Air & Waste Management Association Show New Products information sheet (posted June 25, 1999) at www.pollutionengineering.com/events/conferences/awma99/awmanp6.htm (downloaded 11/18/02).	

Examiner Signature	CHESTER T. BARRY PRIMARY EXAMINER	Date Considered	1/10/06
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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/677,210
(use as many sheets as necessary)				Filing Date	10/02/2003
				First Named Inventor	Felix A. Perriello
				Group Art Unit	1724
				Examiner Name	Chester T. Barry
Sheet	1	of	5	Attorney Docket Number	GLOB 64012

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CTB		3,242,071		Walker	03-22-1966	
		3,616,216		Wegner	10-26-1971	
		3,846,290		Raymond	11-05-1974	
		3,969,446		Franklin, Jr.	07-13-1976	
		4,033,763		Markels Jr.	07-05-1977	
		4,111,808		Fair	09-05-1978	
		4,328,175		Roeckel et al.	05-04-1982	
		4,454,077		Litz	06-12-1984	
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		4,645,603		Frankl	09-22-1987	
CTB		4,695,378		Ackman et al.	09-22-1987	

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Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ¹	Number ¹	Kind Code ² (if known)			
CTB		DE	4142063		Wisstrans Umwelt GmbH	12/19/1991	
CTB		EP	0098138		Exxon Research and Engineering Company	01/11/1984	

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Sheet

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Application Number	10/677,210
Filing Date	10/02/2003
First Named Inventor	Felix A. Perriello
Group Art Unit	1724
Examiner Name	Chester T. Barry
Attorney Docket Number	GLOB 64012

U.S. PATENT DOCUMENTS

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		Number	Kind Code ² (if known)			
CTB		4,713,343		Wilson Jr. et al.	12-15-1987	
1		4,737,289		Castaldi et al.	04-12-1988	
		4,789,478		Revis et al.	12-06-1988	
		4,790,940		Castaldi et al.	12-13-1988	
		4,906,454		Melanson Jr. et al.	03-06-1990	
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		5,006,250		Roberts et al.	04-09-1991	
		5,037,551		Barkley et al.	08-06-1991	
		5,038,715		Fahs II	08-13-1991	
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		5,062,956		Lupton et al.	11-05-1991	
		5,073,309		Bousquet et al.	12-17-1991	
		5,082,652		Mayfield et al.	01-21-1992	
CTB		5,085,809		Stirling	09-04-1992	

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				Complete if Known	
				Application Number	10/677,210
				Filing Date	10/2/2003
				First Named Inventor	Felix A. Perriello
				Group Art Unit	1724
				Examiner Name	Chester T. Barry
Sheet	3	of	5	Attorney Docket Number	GLOB 64012

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		Number	Kind Code ² (if known)			
CTB		5,169,532		Whitlock	12-08-1992	
		5,277,815		Beeman	01-11-1994	
		5,302,286		Semprini et al.	04-12-1994	
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				First Named Inventor	Felix A. Perriello
				Group Art Unit	1724
				Examiner Name	Chester T. Barry
Sheet	4	of	5	Attorney Docket Number	GLOB 64012

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		Number	Kind Code ³ (if known)			
CTB		5,512,479		Steffan	04-30-1996	
		5,529,693		Yano et al.	06-25-1996	
		5,651,890		Trost	07-29-1997	
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		Office ⁵	Number ⁶	Kind Code ³ (if known)				

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		Filing Date	10/2/2003
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		Examiner Name	Chester T. Barry
Sheet	5	of	5
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CTB		6,183,644	B1	Adams et al.	02-06-2001	
		6,210,579	B1	Perriello	04-03-2001	
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		6,306,302	B1	Maree et al.	10-23-2001	
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		6,383,388	B1	Krauter et al.	05-07-2002	
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		6,488,850	B2	Perriello	12-03-2002	
		Re. 32,562		Litz	12-15-1987	
		6,669,846	B2	Perriello	12-30-2003	
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		Office ³	Number ⁴	Kind Code ⁵ (if known)			

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